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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,527	03/28/2001	Evert E. Deboer	Q63887	1846
116	7590	05/04/2005	EXAMINER	
PEARNE & GORDON LLP			LEVITAN, DMITRY	
1801 EAST 9TH STREET				
SUITE 1200			ART UNIT	
CLEVELAND, OH 44114-3108			PAPER NUMBER	
			2662	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/818,527

Applicant(s)

DEBOER ET AL.

Examiner

Dmitry Levitan

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 13-39 is/are rejected.
- 7) ☒ Claim(s) 5-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2662

Amendment, filed 02/07/05, has been entered. Claims 1-39 remain pending.

Specification

In light of Applicant's amendment, the objection to the specification has been withdrawn.

Claim Objections

In light of Applicant's amendment, the objection to the claims 31-38 has been withdrawn.

Claim Rejections - 35 USC § 112

1. Claims 14-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not provide sufficient details to enable a skilled in the art to make and use the invention because it does not adequately describe the following:

Regarding claims 14 and 27, the limitations "means for searching for provisioned protection bandwidth within a current LSR and means for searching for provisioned protection bandwidth within an adjoining LSR, if the provisioned protection bandwidth is not found within the current LSR".

The specification does not provide enough details about the structure and operation of the elements associated with the above identified claimed features to enable one skilled in the art to make and use the invention without undue experimentation.

Claim Rejections - 35 USC § 103

2. Claims 1-4, 13-17, 26-30 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mansour (US 5,058,105).

3. Regarding claims 1, 14 and 27, Mansour substantially teaches the limitations of claim 1: A method for allocating protection bandwidth for restoring data traffic following a resource failure (1:49-57) between first and second nodes (nodes 100-1 and 100-5 on Fig. 1 and 2:15-54) in a network comprising two adjoining line switched rings (ring 1 consisting of branches 103, 104, 111, 110, 109 and 108 and ring 2 consisting of branches 103, 104, 111, 114, 113, 112, 108 on Fig. 1 and 2:34-50) and interconnected with sparsely provisioned protection (branch 110 and 109 on Fig. 1 without sufficient spare capacity 5:36-55), comprising steps:

Searching for provisioned protection bandwidth within a current LSR (loop 151 on Fig. 1 and 6:57-60); and

If the provisioned protection bandwidth is not found within the current ring, searching for it within adjoining LSR (establishing connectivity loop 152 on Fig. 1 and 6:62-66).

Mansour does not teach rings interconnected by a respective matched pair of SAP nodes.

Official notice is taken that rings interconnected by a respective matched pair of SAP nodes is well known in the art to establish primary and secondary nodes for the protection function.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to interconnect rings by a respective matched pair of SAP nodes in the system of Mansour to improve the system failure operation by establishing primary and secondary nodes in the system.

Art Unit: 2662

4. Regarding claims 3, 16 and 29, Mansour teaches the LSR on which the failure was detected (ring 1 with branch 103 failure on Fig. 1).

5. Regarding claims 4, 17 and 30, Mansour teaches allocating protection bandwidth to a protection path (identifying spare capacity on Table 1, Fig. 2 and 5:45-59).

6. Regarding claims 2, 15 and 28, Mansour does not teach rings as BLSRs.

Official notice is taken that BLSRs are well known in the art, often used to provide traffic protection in case of the path failure.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use BLSRs in the system of Mansour to utilize well known technology.

7. Regarding claims 13, 26 and 39, Mansour does not teach generating an alarm if protection bandwidth cannot be located.

Official notice is taken that generating alarm when the protection is failed is well known in the art to notify the operator about the failure in the network.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to generate alarm in the system of Mansour to improve the system failure indication.

Allowable Subject Matter

8. Claims 5-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments filed 02/07/05 have been fully considered but they are not persuasive.

On page 12 of the Response, Applicant argues that “means for searching for provisioned protection bandwidth within a current LSR and means for searching for provisioned protection bandwidth within an adjoining LSR, if the provisioned protection bandwidth is not found within the current LSR” in claims 14 and 27 are fully enabling.

Examiner respectfully disagrees.

The specification provides no structure or operation elements for the claimed “means” and the “means” in claim 14 are the essence of what Applicant considers his invention.

Examiner believes that essential information of claims 14 and 27 should be disclosed to enable one skilled in the art to make and use the invention without undue experimentation.

On page 12 of the Response, Applicant argues that Mansour does not disclose a communication network comprising at least two adjoining line switched rings, but built on a mesh structure.

Examiner respectfully disagrees.

Mansour teaches a communication network comprising rings as disclosed above (rejection of claim 1). Rings can be part of a mesh network, as evidenced by Stern, Multiwavelength optical networks, pp 624-628, in chapter See 8.2.4.1 Mesh architecture using a ring cover for survivability, submitted as IDS, and can utilize different methods for automatic protection switching.

Art Unit: 2662

On page 13 of the Response, Applicant argues that Mansour does not teach provisioned protection bandwidth within a current LSR.

Examiner respectfully disagrees.

Mansour teaches provisioned protection bandwidth within a current LSR (loop 151 On Fig. 1 and 6:57-60) and discloses the provisioned protection bandwidth in each of the links of the LSR, using a link table on Fig. 2

On page 13 of the Response, Applicant argues that Mansour does not teach searching for provisioned protection bandwidth within an adjoining LSR.

Examiner respectfully disagrees.

Mansour does teach searching for provisioned protection bandwidth within an adjoining LSR (establishing connectivity loop 152 on Fig. 1 and 6:62-66).

Applicant's arguments regarding Mansour method of selecting higher/additional order paths with splitting the traffic are not relevant, because the rejection is not based on this part of Mansour system.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 2662

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dmitry Levitan
Patent Examiner
04/18/05



HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600